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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,234	09/20/2001	Howard J. Jacob	13482-002001	5858

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EXAMINER

LY, CHEYNE D

ART UNIT	PAPER NUMBER
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1631

DATE MAILED: 05/30/2003

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,234

Applicant(s)

JACOB ET AL.

Examiner

Cheyne D Ly

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on April 1, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 7-20 and 22-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 21 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-26 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election with traversal of Group I, claims 1-6, 21, and 23, in Paper No.14, filed April 1, 2003, is acknowledged.
2. The traversal is on the ground(s) that it would not be unduly burdensome to perform independent searches on the claims in Groups I-VII or Groups VIII-X together. This is not found persuasive because these claims are directed to different methods with distinct active step requirements necessary for achieving their respectively intended goals. It is acknowledged that the claims in the said Groups are linked by the used of data directed to physiological determinants to derived relationships based on physiological or expression profiles. However, the different intended goals and supporting active steps of each method cause them to be distinct. This lack of overlapping searches documents the undue search burden if they were search together.
3. It is noted that Group I is directed to claims 1-6, 21, and 25 as cited by the restriction requirement, Paper No.14, mailed February 26, 2003. It is assumed that applicants inadvertently elected Group I, claims 1-6, 21, and 23, and the inclusion of claim 23 instead of 25 to Group I was a typographical error. In order to expedite the prosecution process, Group I, claims 1-6, 21, and 25 are examined on the merits. Applicants are advised to revise the Response to Restriction Requirement to read Group I, claims 1-6, 21, and 25, in Applicants' response to this instant office action.
4. The requirement is still deemed proper and is therefore made FINAL.
5. Claims 1-6, 21, and 25 are examined on the merits.

OBJECTIONS

6. Claim 21 is objected to due to the inclusion of subject matter as summarized in claims 7, 10, 17, or 18, which has been non-elected due to a restriction requirement and therefore withdrawn from consideration.

CLAIM REJECTION UNDER - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6 and 25 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Eisen et al. (1998).

3. Eisen et al. discloses a method for determining the relationship among physiological determinants such as genes.

4. The method of Eisen et al. comprises of using a hierarchical clustering algorithm based closely on the average-linkage method which was developed for clustering correlation matrixes. For a set of n genes, an upper-diagonal similarity matrix is computed and node join two genes representing the most similar pair (§ Hierarchical Clustering, page 14864, column 1, lines 1-4 to column 2, lines 1-6), as in claim 1, steps (a)-(d); claim 2; and claim 25.

5. Figure 2 discloses a color-coded graphical matrix representing the derived relationship of the physiological determinants, as in claim 3.

6. The source of the physiological determinants is 8,600 distinct human transcripts (§ Sources of Experimental Data, page 14864, column 1, lines 8-11), as in claims 4 and 6.

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7. Claims 1 and 21 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Enright et al. (2000).
8. Enright et al. discloses a method for using a computer program, GeneRace, written in ANSI C, and developed on a Sun Ultra workstation (§ System and method, page 452, column 2, lines 1-2), as in claim 21.
9. The method of Enright comprises using a recursive single-linkage clustering of the corrected matrix to allow efficient and accurate family representation for each protein in the dataset (Abstract etc.) and for multi-domain proteins two clusters of are artefactually linked (§ Multi-domain proteins, page 452, column 2, lines 4), as in claim 1, steps (a)-(d).

CONCLUSION

10. NO CLAIM IS ALLOWED.
11. Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (see 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703) 308-4242 or (703) 305-3014.
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Dune Ly, whose telephone number is (703) 308-3880. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

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13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D., can be reached on (703) 308-4028.
14. Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instruments Examiner, Tina Plunkett, whose telephone number is (703) 305-3524 or to the Technical Center receptionist whose telephone number is (703) 308-0196.

C. Dune Ly
5/26/03


ARDIN H. MARSCHEL
PRIMARY EXAMINER